IN THE CLAIMS:

Kindly replace the claims with the following:

1. (Original) A method of demodulating and decoding an encoded interleaved signal, said method comprising:

demodulating a received encoded interleaved signal thereby producing soft-decision demodulated output words;

de-interleaving and scaling said soft-decision demodulated output words thereby producing de-interleaved and scaled words, said scaling being performed for a plurality of successively demodulated output words at a time, thereby applying scaling factors that have substantially the same value for adjacent demodulated output words of said plurality of successively demodulated output words, said de-interleaved and scaled words being word-length-reduced words; and

decoding said de-interleaved and scaled words.

2. (Original) A method as claimed in Claim 1, thereby first applying intermediate scaling factors to said plurality of successively demodulated output words, and then determining said scaling factors from said intermediate scaling factors such that said adjacent demodulated output words have said substantially same scale factor applied.

3. (Original) A method as claimed in Claim 2, wherein said determining of said scaling factors from said intermediate scaling factors achieves a uniform scaling factor for said plurality of successively demodulated output words.

4. (Original) A method as claimed in Claim 2, therein performing said scaling in a de-interleaving memory, said application of said intermediate scaling factors being done while writing said plurality of successively demodulated output words into said de-interleaving memory, and said determining of said scaling factors from said intermediate scaling factors being done in-place in said de-interleaving memory.

5. (Original) A method as claimed in Claim 2, therein increasing a previously determined intermediate scaling factor for a current demodulated output word if said current demodulated output word exhibits a predetermined number of underflows.

6. (Original) A method as claimed in Claim 2, therein decreasing a previously determined intermediate scaling factor for a current demodulated output word if said current demodulated output word exhibits a predetermined number of overflows.

7. (Original) A method as claimed in Claim 1, therein performing said scaling in a de-interleaving memory and determining said scaling factors through digital low pass filtering while writing said plurality of successively demodulated output words into said de-interleaving memory.

8. (Original) A method as claimed in Claim 1, therein demodulating said received encoded interleaved signal with a rake receiver.

9. (Original) A method as claimed in claim 1, wherein said soft-decision demodulated output words are log-likelihood ratios, and said decoding is maximum likelihood decoding.

10. (Original) A method as claimed in Claim 9, therein performing said maximum likelihood decoding through a Viterbi algorithm.

11. (Original) A method as claimed in Claim 1, wherein said received encoded interleaved signal is convolutional encoded.

12. (Original) A receiver for receiving an encoded interleaved signal, said receiver comprising:

a demodulator for demodulating said received encoded interleaved signal, said demodulator producing soft-decision demodulated output words;

a de-interleaving and scaling memory for de-interleaving and scaling of said soft-decision demodulated output words, said receiver being configured to produce de-interleaved and scaled words in said de-interleaving and scaling memory for a plurality of successively demodulated output words at a time, thereby applying scaling factors that have substantially the same value for adjacent demodulated output words of said plurality of successively demodulated output words, said de-interleaved and scaled words being word-length-reduced words; and

a decoder for decoding said de-interleaved and scaled words.

13. (Original) A receiver as claimed in Claim 12, said receiver further being configured to first apply intermediate scaling factors to said plurality of successively demodulated output words, and then determine said scaling factors from said intermediate scaling factors such that said adjacent demodulated output words have said substantially same scale factor applied.

14. (Original) A receiver as claimed in Claim 12, said receiver being configured to apply said intermediate scaling factors while writing said plurality of successively demodulated output words into said de-interleaving memory, and to do said determination of said scaling factors from said intermediate scaling factors in-place in said de-interleaving and scaling memory.

15. (Original) A receiver as claimed in Claim 13, said receiver being configured to increase a previously determined intermediate scaling factor for a current demodulated output word if said current demodulated output word exhibits a predetermined number of underflows.

16. (Original) A receiver as claimed in Claim 13, said receiver being configured to decrease a previously determined intermediate scaling factor for a current demodulated output word if said current demodulated output word exhibits a predetermined number of overflows.

17. (Original) A receiver as claimed in Claim 13, said receiver being configured to achieve a uniform scaling factor for said plurality of successively demodulated output words when determining of said scaling factors from said intermediate scaling factors.

18. (Original) A receiver as claimed in Claim 12, further comprising a digital low pass filter, said receiver being configured to determine said scaling factors through digital low pass filtering of said soft-decision demodulated output words with said digital low pass filter while writing said plurality of successively demodulated output words into said de-interleaving memory.

19. (Original) A receiver as claimed in Claim 12, wherein said demodulator is a rake receiver.

20. (Original) A receiver as claimed in Claim 12, wherein said decoder is a Viterbi-decoder.